The Paleocene assemblages of agglutinated foraminifera from deep-water deposits of the northern Tarcău Nappe (Eastern Carpathians, Romania)

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The studied section is situated in the northern part of the Tarcău Nappe, in the Eastern Carpathians Flysch (Fig. 1).

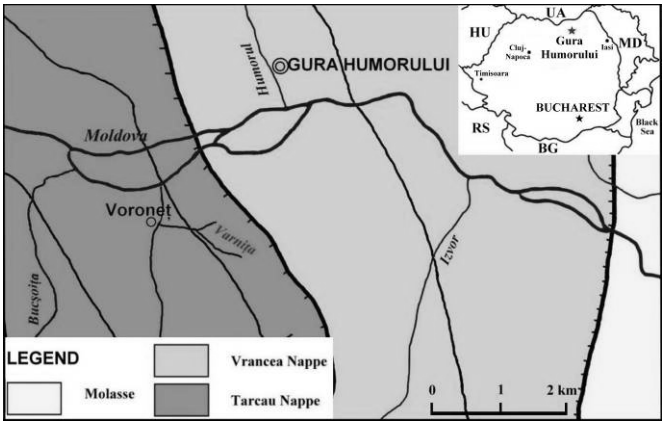

Fig. 1: Location of the investigated area (after Geological Map of Moldovița – Gura Humorului region; Ionesi, 1971).

We have analysed agglutinated foraminifera from clay deposits collected from Runcu (Ionesi, 1998) and Izvor (Ionesi, 1966) Formation on Varnița Brook, starting from its confluence with Voroneț Brook, which is a tributary of Moldova River.

In this area, previous studies on Paleogene microfauna were carried out by Ionesi and Tocorjescu (1968), and Ionesi (1971, 1975).

The microfaunal analyses were performed on 13 samples, 2 samples from Runcu Formation and 11 samples from Izvor Formation. We identified 30 taxa of agglutinated foraminifera, having a scattered distribution throughout the studied interval. In the foraminiferal assemblages, the species *Rhabdammina linearis* (Brady), *Saccammina placenta* (Grzybowski), *Saccammina complanata* (Franke), *Hyperammina rugosa* Vardenius and Van Hinte and *Kalamopsis grzybowskii* (Dylazanka) are dominant.

From a total of 30 taxa, what we have mentioned in this study, 8 are listed for the first time in this area (Table 1).

No.	Taxa	Runcu F.	Izvor F.
1	*Rhabdammina linearis* (Brady)	x	x
2	*Hyperammina rugosa* Vardenius and Van Hinte	x	x
3	*Ammodiscus peruvianus* Berry	x	
4	*Ammodiscus siliceous* Terquem	x	
5	*Trochamminoides trifolius* (Egger)		x
6	*Recurvoidella lamella* (Grzybowski)	x	x
7	*Recurvoides immane* (Grzybowski)	x	
8	*Recurvoides walteri* (Grzybowski)		x

Table 1: Foraminiferal taxa mentioned for the first time on Varnița Brook

Based on the presence of the index taxon *Rzehakina fissistomata* (Grzybowski), the age of the analysed foraminiferal assemblages was determined as being Paleocene (Bubík, 1995; Bąk *et al*., 1997; Olszewska, 1997; Oszcypko *et al*., 2005).

The foraminiferal assemblages consist of a diverse association of agglutinated foraminifera, belonging to the so called "Flysch-type" biofacies that suggest a bathyal to abyssal sedimentation paleoenvironment.

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